

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner:

Serial No.:

10/045,481

Group Art Unit:

Filed:

October 22, 2001

Elliott J. Straus et al.

Date: February 13, 2002

THE CHILL

For:

"SELECTIVELY CONTROLLING IN-MOLD COATING FLOW"

Assistant Commissioner for Patents Washington, D.C. 20231

## **INFORMATION DISCLOSURE STATEMENT**

Sir:

The invention relates to molded articles or substrates having an in-mold coating thereon are disclosed. The in-mold coated substrates are produced by a method wherein the flow of the in-mold composition onto the substrate can be selectively controlled. The molded articles can be preferentially coated in desired or predetermined areas with in-mold coating compositions by controlling the thickness or depth of various sections of the substrate.

In a further embodiment, a molded article or substrate is provided with an in-mold coating containment flange to substantially contain the in-mold coating within the mold cavity and on the desired area of a part before the coating has been cured.

In yet another embodiment of the present invention, a molded article or substrate is provided with at least runner section or preferred flow channel to promote in-mold coating flow over the surface of a substrate.

A further embodiment of the present invention provides a molded article with an area of increased relative thickness at the location of in-mold coating injection to encourage or promote in-mold coating flow.

According to 37 C.F.R. §1.97(b)(3) this Information Disclosure Statement shall be considered by the office as the same has been filed before the mailing date of the first office charge them to the deposit account 08-3150.

The following patents and/or documents, copies enclosed, which the Examiner should consider with respect to the above-identified United States Patent Application:

US PATENT/DOCUMENT		
PATENT/DOCUMENT NO.	DATE	NAME 🔪
4,076,788	February 28, 1978	Ditto
4,081,578	March 28, 1978	Van Essen et al.
4,189,517	February 19, 1980	Shanoski et al.
4,222,929	September 16, 1980	Shanoski et al.
4,316,869	February 23, 1982	Van Gasse
4,331,735	May 25, 1982	Shanoski
4,350,739	September 21, 1982	Mohiuddin
4,366,109	December 28, 1982	Svoboda
4,414,173	November 8, 1983	Cobbledick et al.
4,515,710	May 7, 1985	Cobbledick
4,668,460	May 26, 1987	Ongena
4,798,697	January 17, 1989	Nohara et al.
4,921,669	May 1, 1990	Vetter et al.
4,963,312	October 16, 1990	Müller
5,053,177	October 1, 1991	Vetter et al.
5,084,353	January 28, 1992	Cobbledick et al.
5,132,052	July 21, 1992	Cobbledick et al.
5,359,002	October 25, 1994	Cobbledick et al.
5,391,399	February 21, 1995	Cobbledick et al.
5,496,509	March 5, 1996	Yamamoto et al.
5,562,979	October 8, 1996	Easterlow et al.
5,614,581	March 25, 1997	Cobbledick et al.
5,632,949	May 27, 1997	Fisher et al.
5,639,403	June 17, 1997	lda et al.
5,658,672	August 19, 1997	Lenke et al.
5,736,090	April 7, 1998	Yamamoto et al.
5,777,053	July 7, 1998	McBain et al.
5,882,559	March 16, 1999	Eckardt et al.
5,902,534	May 11, 1999	Fujishiro et al.
5,906,788	May 25, 1999	Boeckler
6,180,043	January 30, 2001	Yonemochi et al.
Serial No. 60/198,691	April 20, 2001	Mike Brett



FOREIGN	DOCUM	/IFNTS

PCT/CA01/00534 April 20, 2001 PCT

#### ARTICLES

The Sabreen Group, Inc.'s "Preparing Plastics for Painting" article.

Chlorocarbons and Chlorohydrocarbons-C<sub>2</sub> to Combustion Technology, Kirk-Othmer Encyclopedia of Chemical Technology, Fourth Edition, Volume 6, (1993), pp. 676-690.

GE Plastics Processing Guide, <u>GE Engineering Thermoplastics Injection Molding Processing Guide</u>, General Electric, 1998, pp. i-iv.

GE Injection Molding Mold Design, <u>GE Engineering Thermoplastics</u>
<u>Injection Molding Processing Guide</u>, General Electric, 1998, pp. 1-1 – 1-24.

GE Injection Molding Processing, <u>GE Engineering Thermoplastics Injection Molding Processing Guide</u>, General Electric, 1998, pp.2-1 – 2-12.

GE Injection Molding Troubleshooting Guide, <u>GE Engineering</u> Thermoplastics Injection Molding Processing Guide, General Electric, 1998, pp. 3-1 – 3-7.

Long Fiber Reinforced Thermoplastics, <u>Injection Molding Guide</u>, Celstran, 1999, pp. 1-27.

Copies of the publications are included for the express purpose of providing the Patent and Trademark Office with an ample opportunity to evaluate the same and to arrive at an independent assessment of their materiality, if any, with regard to the examination of the application.

In reviewing the enclosed copies of the above publications, the Examiner is requested to ignore any underscoring or highlighting which may appear because such markings may or may not have any relationship to the subject matter of the above-identified application. The copies being submitted with this Information Disclosure Statement are the best copies available at this time.

An official action considering the enclosed items is earnestly solicited.

Respectfully submitted,

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## CERTIFICATE OF MAILING

Sir:

that the attached **INFORMATION** undersigned hereby certifies The DISCLOSURE STATEMENT, PTO-1449 FORM, AND 40 REFERENCES were mailed to the Assistant Commissioner of Patents, Washington, D.C. 20231, with sufficient firstclass postage, no special handling, on February 13, 2002, before 5:00 PM, thereby ensuring that such document(s) will be in the hands of the U.S. Postal Service by the close of business this day.

The Commissioner is hereby authorized to charge any fees, which might be required or credit any overpayment of fees with regard to the attached document(s) to Account No. 07-1045.

Respectfully submitted,

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Information Disclosure Statement, PTO-1449 Form

40 References